

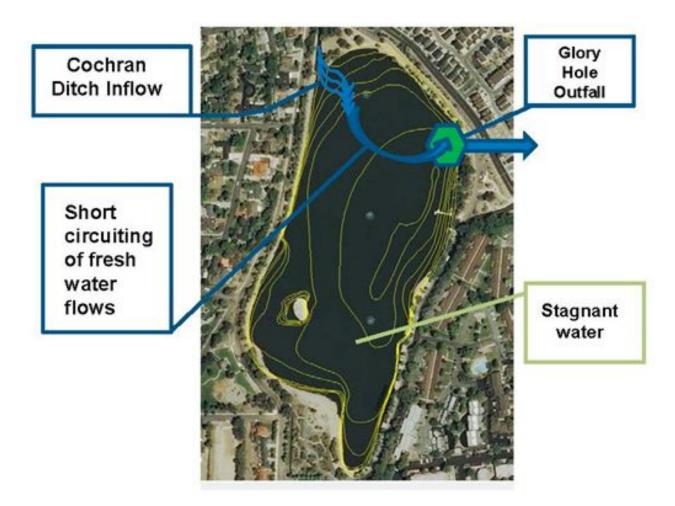
## Virginia Lake Enhanced Water Circulation Project October 2015

Construction on a new pipeline at Virginia Lake is expected to start the week of October 26. This project is an important lake management change and should result in improved water quality. Below are several figures and descriptions of the the water circulation

## How Water Currently Circulates Through Virginia Lake

During normal operations, water enters the lake along the northwest shore, via the Cochran Ditch, and exits through the Glory Hole (see Figure 1), essentially eliminating fresh water replenishment from reaching three-quarters of the lake.

Figure 1



## How Water will Circulate After the Pipeline is Installed

A 1300 foot pipeline will be submerged along the eastern perimeter of the lake. This will connect the existing outlet at the northeast end to the southeast shore and will improve lake circulation. Creating an entrance to the glory hole outlet from 1300 feet away, (flows will enter the submerged pipe and ultimately exit at the existing Glory Hole) will ensure fresh water circulates throughout Virginia Lake (see Figure 2).

The new circulation system will create better circulation in Virginia Lake 80 percent of the time. It will not help during drought conditions when flows in the Truckee River are too low to contribute flows to Cochran Ditch. Noticeable changes to lake water quality will not occur until flow within the Truckee River is high enough to allow for diversions through the Cochran Ditch to Virginia Lake.

Figure 2

